Safety Instruction

Thank you for purchasing Leopard HD-SDI Camera. Please read the instruction carefully for a thorough understanding of how the camera operates.

1.Operating requirements

1.1 Before using the camera, please read this manual carefully and keep it in safe place for later use.

1.2 Installation should be proceeded by professional service. Follow the instructions and do not dismantle without authorization.

1.3 In order to protect the sensor, do not expose the lens to intense light source for long time.

1.4 Do not touch the lens directly. Please cover the dustproof wrap when the camera is not being used.

1.5 Please use a dry soft cloth to clean the camera. If it is hard to clean, use detergent with water, wipe and dry the camera.

1.6 Do not install the camera under air conditioning's air exit, otherwise lens is easy to blur with condensation of moisture.

1.7 Please ensure that all electric power sources are turned off when perform installation, cleaning, etc.

1.8 Please transport, use and store the camera in allowable temperature and humidity.

1.9 If the camera is broken, for example power cord or plug damaged, splash liquid or foreign matter falls into camera, raining, wet, etc. Please contact manufacturer or maintenance center (Do not modify and maintenance without permission)

2.Statement

2.1 All photos here are for reference only. Specifications are subject to physical product.

2.2 This manual is subject to change without further notice.

2.3 Please contact with customer service for the newest procedures and supplementary specification.

2.4 This manual list several model numbers for reference , please according to the actual product.

2.5 We will do the best to keep this manual complete and accurate, but some data may has deviation. If any doubt or dispute ,company retain the final right of the product.

LEOPARD HD-SDI CAMERA

USER MANUAL

INTRODUCTION:

This camera which uses the latest 2.1M Pixel progressive scan CMOS sensor is specially designed for security monitoring. It is a quality new-designed HD camera which applies DC12V and supports users to customize the output parameter settings.

Packing List

NO.	Name	Model	Number
1	Camera	LI-HDSDI-1080-D	1
2	Power line	—	1
3	Warranty Card	—	1

Feature

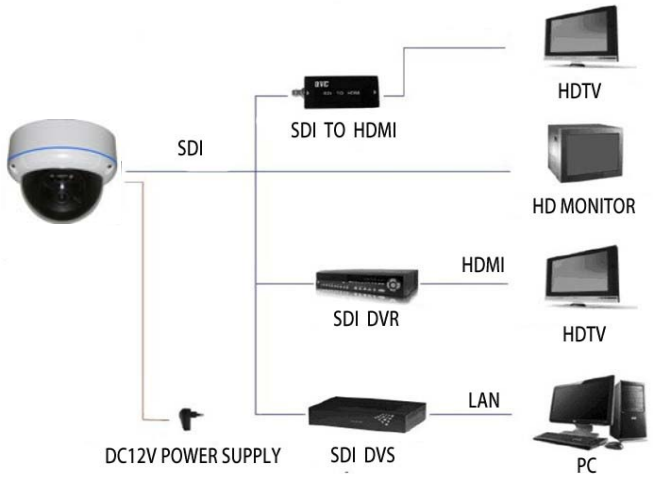
- **ACCE (Adaptive Color & Contrast Enhancement)**
- **NTSC/PAL Selectable**

Specification

Imaging Sensor	1/3" 2.1Megapixel CMOS
Scanning System	Progressive Scan
S/N Ratio	More than 50dB (AGC Off)
Video Output Mode	1080P(1920 X 1080)
Video Output Level	HD-SDI /1.0 Vp-p (75Ω， Composite)
Lens	2.8-12mm Manual Zoom Lens (3M Pixels)
Min. Illumination	1.0Lux(Color) , 0. 5Lux (BW)
OSD	Built-in
Electronic Shutter	Auto/FLK/1/25,30sec ~ 1/50000sec
AGC	Low/Middle/High
2D/3D-NR	2DNR/3DNR/SMART NR
Digital Zoom/PIP	On/Off(x2 ~ x64)
D-DFFECT	Freeze/Mirror/D-Zoom/NEG. IMAGE
Voltage/Current	DC12V±10% / 210mA (600mA with IR on)
Operating temperature	-10° ~+50° C
Dimension (mm)	¢ 142 x 100(H) mm
Weight (g)	1000

Wire ports

Application method



Function Menu

OSD MENU				
LENS	■DC	■VIDEO	■MANUAL	
EXPOSURE	■SHUTTER ■ACCE	■AGC ■DEFOG	■SENS-UP ■BACKLIGHT	■BRIGHTNESS
WHITE BAL	■ATW ■INDOOR	■AWC→SET ■OUTDOOR	■MANUAL	
DAY&NIGHT	■COLOR	■AUTO	■EXT	■B/W
NR	■2DNR	■3DNR	■SMART NR	
SPECIAL	■CAM TITLE ■LANGUAGE	■D-EFFECT ■DEFECT	■MOTION ■RS485	■PRIVACY
ADJUST	■SHARPNESS ■NTSC/PAL	■MONITOR	■OSD	■LSC
RESET	■FACTORY			
EXIT				

How to use the camera

LENS

1.When the SETUP menu screen is displayed, select LENS by using the UP and Down buttons so that the arrow indicates LENS

► DC/VIDEO/MANUAL: Select Auto Iris Lens.

EXPOSURE

1.Using this function, you can control screen brightness.

► SHUTTER: MANUAL/AUTO.

***** MANUAL

NTSC: 1/30 ~ 1/50000, X2 ~ X30.

PAL: 1/25 ~ 1/50000, X2 ~ X30.

***** FLK: Select this when you picture flicker.

* AUTO: Select this mode to control the shutter speed automatically. Shutter speed is automatically controlled

depending on the brightness of the screen.

► AGC: You can adjust it at LOW,MIDDLE and HIGH level. The higher gain level means the brighter screen but the higher noise.

► SENSE-UP: When it is at night, the camera automatically detects the light level and maintains a clear picture.

► BRIGHTNESS: You can control the brightness .

► ACCE: If there are bright area and dark area on the screen at the same time, this function makes both areas to be clear.

- OFF, LOW, MIDDLE, HIGH 4step.

► DEFOG: Carry out defog function.

- OFF,LOW,MIDDLE,HIGH 4step.

► BACKLIGHT: This function allows you to get a clear pictures of objects even the objects in strong backlight.

***** BLC : GAIN: LOW,MIDDLE,HIGH

AREA: Area set (size & position).

***** HSBLC: To inhibit strong light and compensate brightness of the area around it.

*SELECT: AREA 1~AREA 4 *DISPLAY: select area ON/OFF

*LEVEL: Masking level set *MODE: ALL DAY and NIGHT

*BLACK MASK: Mask ON/OFF

WHITE BAL.

► ATW: Select this when the color temperature is between 2400° K and 11,000° K.

► AWC→SET: To find the optimal setting for the current luminance environment in this mode, set the camera towards a sheet of white paper and press the SET button. If the environment changes, readjust it.

► OUTDOOR: Select this when color temperature is around 5,100° K.

► INDOOR: Select this when the color temperature is around 3,100° K.

► MANUAL: Select this to fine-tune White Balance manually.

DAY & NIGHT

♦ You can display pictures in Color or Black and White.

► AUTO: Switched Color and B/W automatically.

- DELAY: You can select the duration time about changing the day/night mode.

► COLOR: The picture is always displayed in color.

► B/W: The picture is always displayed in B/W.

NR

♦ This function reduces the background noise in a low luminance environment.

*2DNR(noise reduction) *3DNR

* SMART NR (3DNR+ motion detection)

SPECIAL

♦ Select a desired mode using the UP and DOWN buttons.

► CAM TITLE: If you enter a title, the title will be appear on the monitor.

► D-EFFECT

***** FREEZE: You can stop the image or reactive it.

***** MIRROR

- MIRROR: you can flip the image horizontally.
- V-FLIP: you can flip the image vertically.
- ROTATE: you can rotate the image on the screen.

***** D-ZOOM

- PIP: PIP display ON/OFF - D-ZOOM: X2.0~X64
- PAN&TILT: Set to change PIP position.

***** NEG.IMAGE: ON/OFF

► MOTION

***** SELECT: Select AREA1~AREA3.

***** DISPLAY: Select AREA ON/OFF.

***** SENSITIVITY: When the number is high, the detection is increased to recognize even small movement.

***** MOTION VIEW: ON/OFF.

► PRIVACY: Hide an area you want to hide on the screen.

* SELECT: AREA1~8 * DISPLAY: Select AREA ON/OFF

* COLOR: 1~16 color step * DEFAULT: Factory Reset

► LANGUAGE: ENGLISH/CHINESE.

► DEFECT: CMOS correction to compensate for defects that can be occur at the low light conditions.

*LIVE DPC: Auto defect. *LEVEL: Level of Auto defect.

*STATIC DPC: Manual defect. *LEVEL: Manual defect value.

*START: Start defect.(Close the lens to shield the light, Select the START).

*SENS-UP: Sense up value.

► RS485: This function sets up the camera communication status when controlling the camera through an external device.

► VERSION: Version of camera.

ADJUST

► SHARPNESS: Adjust the sharpness of the image.

► MONITOR: CRT monitor and LCD monitor.

* LCD: Set GAMMA,BLUE GAIN,RED GAIN.

► OSD: TEXT COLOR & OUT LINE A adjustable.

► LSC: Lens shading compensation.

► NTSC/PAL: Select NTSC/PAL.

RESET

► FACTORY: Reset the camera setting to the factory defaults. Language and Communication status is not initialized.

EXIT

Press the ENTER button in the EXIT menu to save the current settings and exit the MAIN SETUP menu.